## DRAINAGE SYSTEM OPERATION AND MAINTENANCE PLAN

THE IMPLEMENTATION, INSPECTION, AND REPAIR OF THE EROSION CONTROLS IS THE RESPONSIBILITY OF THE SITE CONTRACTOR DURING CONSTRUCTION.

THE INSPECTION AND OPERATION OF THE STORM WATER MANAGEMENT SYSTEM UPON COMPLETION OF CONSTRUCTION IS THE RESPONSIBILITY OF THE OWNER.

MOUNT CALVARY LUTHERAN CHURCH

472 MASSACHUSETTS AVE. ACTON, MA 01720 (OR ANY FUTURE OWNER)

PARTIES RESPONSIBLE FOR LONG TERM OPERATION/MAINTENANCE:

MOUNT CALVARY LUTHERAN CHURCH

(OR ANY FUTURE OWNER)

## SCHEDULE FOR INSPECTION AND MAINTENANCE:

DEEP SUMP AND HOODED CATCH BASINS

\*THE DEEP SUMP FOR THE CATCH BASINS SHALL BE INSPECTED AND CLEANED ANNUALLY. THE CATCH BASINS HAVE A FOUR FOOT DEEP SUMP AND THE WATER LEVEL IS MAINTAINED BY THE DISCHARGE PIPE AT FOUR FEET. THE DISCHARGE PIPE IS HIDDEN FROM VIEW BY A HOODED

- THE DEPTH OF THE SEDIMENT IN A BASIN SHALL NOT EXCEED A DEPTH OF 18 INCHES AS DETERMINED BY PROBING WITH A STICK. IF THE STICK HITS THE BOTTOM WITHIN 30 INCHES OF THE WATER LEVEL, MORE THAN 18 INCHES OF SEDIMENT HAS ACCUMULATED AND MUST BE REMOVED. LICENSED PERSONS SHOULD REMOVE AND DISPOSE OF THE CONTENTS OF THE SUMP IN ACCORDANCE WITH APPLICABLE REGULATIONS.

THE SEDIMENT FOREBAY SHALL BE INSPECTED AFTER EVERY MAJOR STORM EVENT FOR THE FIRST THREE MONTHS AFTER CONSTRUCTION. THE SEDIMENT FOREBAY

SHALL BE INSPECTED TWICE YEARLY THEREAFTER. SEDIMENT SHALL BE REMOVED FROM THE SEDIMENT FOREBAY UPON DISCOVERY OF 2 INCHES OF SEDIMENT ACCUMULATION.

ERODED OR BARREN SPOTS SHALL BE RECOVERED WITH STONE IMMEDIATELY AFTER INSPECTION TO PREVENT EROSION AND ACCUMULATION OF SEDIMENT. SEDIMENT SHALL BE REMOVED FROM THE FOREBAY AS NEEDED, AT LEAST ONCE EVERY 10 YEARS. THIS PROCEDURE SHALL NOT TAKE PLACE UNTIL THE FLOOR OF THE FOREBAY IS THOROUGHLY DRY.

WATER QUALITY SWALE

\*THE SEDIMENT FOREBAY SHOULD BE CLEANED OUT ONCE PER YEAR TO THE DEPTHS SPECIFIED ON THE SITE PLAN BY STAMSKI AND MCNARY, INC.

\*SEDIMENT SHALL BE REMOVED FROM THE WATER QUALITY SWALE BY HAND ONCE EVERY 10 YEARS TO THE DEPTHS SPECIFIED ON THE SITE PLAN BY STAMSKI AND MCNARY, INC.

\*DURING THE FIRST THREE YEARS AFTER CONSTRUCTION, THE WATER QUALITY SWALE SHALL BE INSPECTED DURING THE GROWING AND NON-GROWING SEASON TWICE PER YEAR. DATA GATHERED DURING THESE INSPECTIONS SHOULD BE RECORDED, MAPPED AND ASSESSED.

- GRASSES SHALL BE INSPECTED FOR SURVIVAL RATE. ANY BARE AREAS SHALL BE RESEEDED PRIOR TO THE END OF THE GROWING SEASON.

- THE WATER QUALITY SWALE SHALL BE INSPECTED FOR AREAS OF CONCENTRATED SEDIMENT DEPOSITS. CONCENTRATED SEDIMENT DEPOSITS SHALL BE REMOVED BY

- SIDESLOPES OF THE WATER QUALITY SWALE SHALL BE INSPECTED FOR EROSION. ALL ERODED AREAS SHALL RECEIVE 6" OF LOAM AND SEED ACCORDING TO THE SITE PLAN BY STAMSKI AND MCNARY, INC.

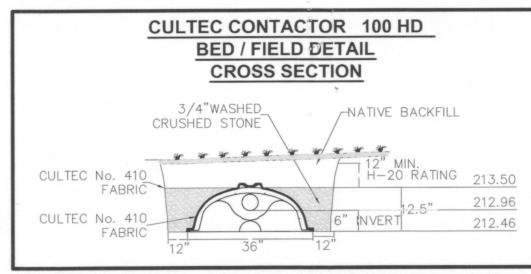
- THE WATER QUALITY SWALE OUTLET STRUCTURE SHALL BE INSPECTED FOR OBSTRUCTIONS. ALL OBSTRUCTIONS SHALL BE REMOVED UPON INSPECTION. ALL SEDIMENT THAT HAS ACCUMULATED IN THE STRUCTURE SHALL BE REMOVED BY

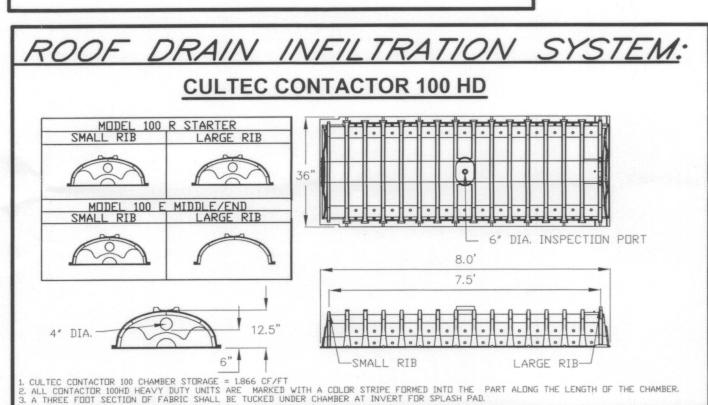
EMERGENCY CONTACTS:
IN THE EVENT OF A HAZARDOUS MATERIALS SPILL ON THE SITE THE FOLLOWING PARTIES SHALL BE\_CONTACTED:

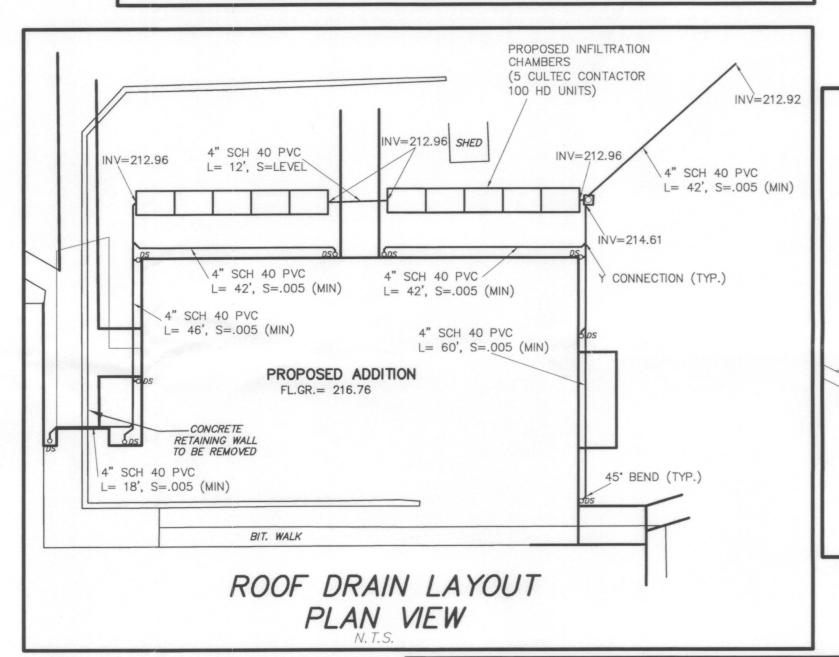
FIRE DEPARTMENT: PH: 978-264-9645

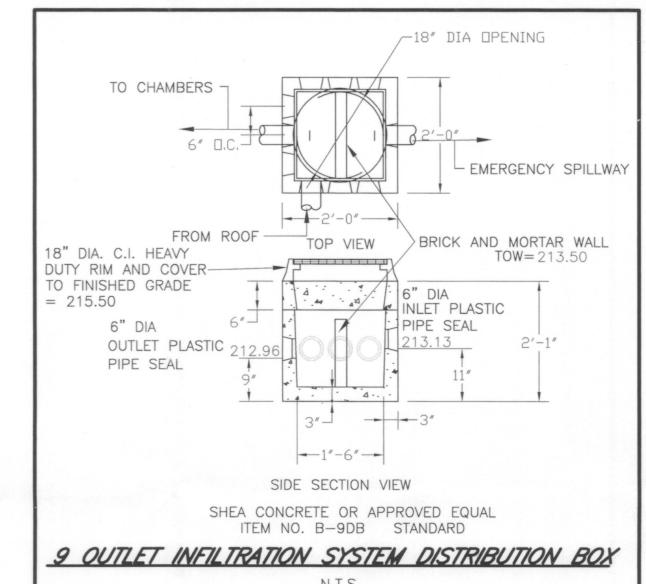
THE MOUNT CALVARY LUTHERAN CHURCH

RECORDS: THE OWNER SHALL MAINTAIN AN INSPECTION LOG OF ALL ELEMENTS OF THE STORM WATER MANAGEMENT PLAN. THE OWNER SHALL MAINTAIN A MAINTENANCE LOG DOCUMENTING THE INSPECTION AND MAINTENANCE OF THE DRAINAGE STRUCTURES UNDER HIS CONTROL. A COPY OF THE EROSION CONTROL AND STORM WATER MAINTENANCE PLAN AND INSPECTION LOGS SHALL BE KEPT ONSITE AT ALL TIMES.

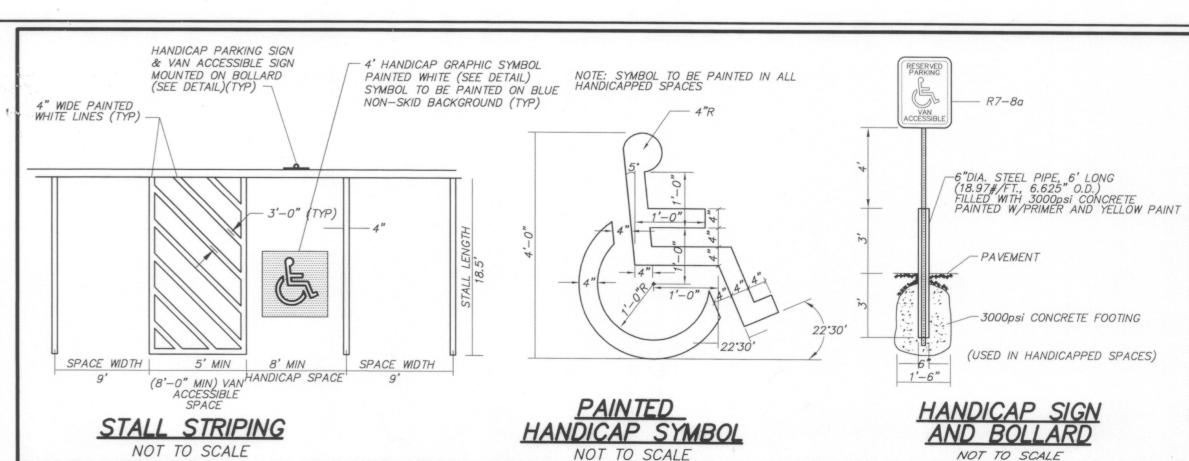




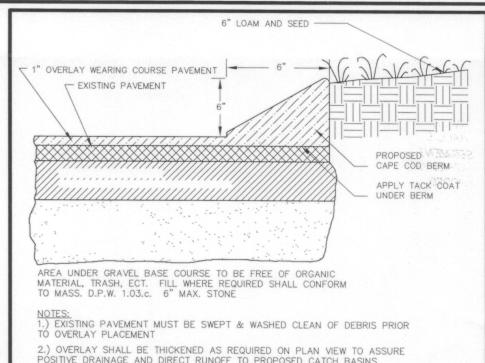




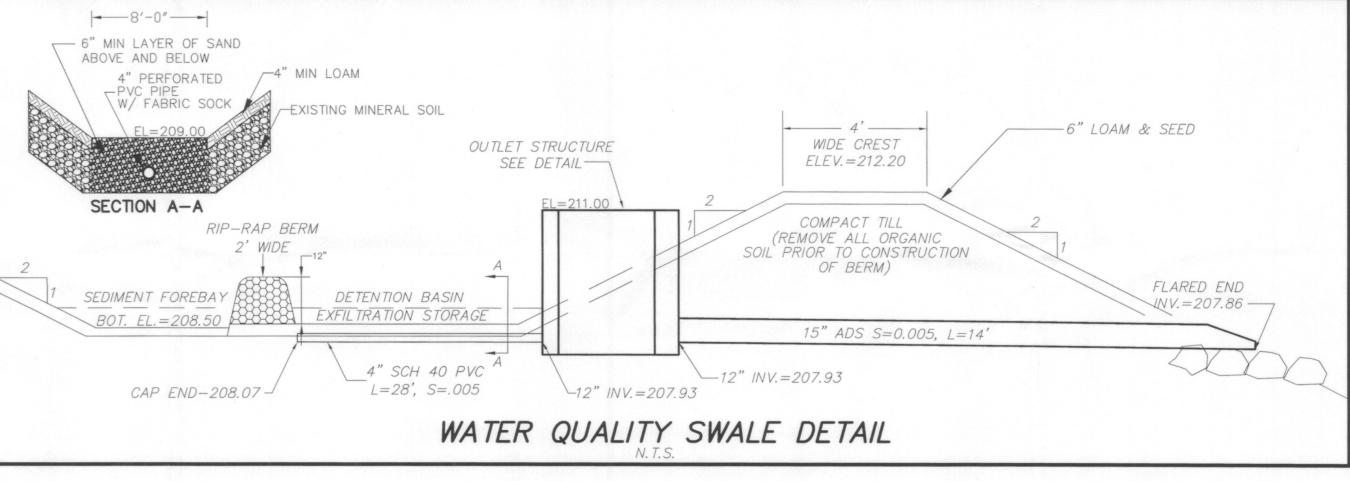
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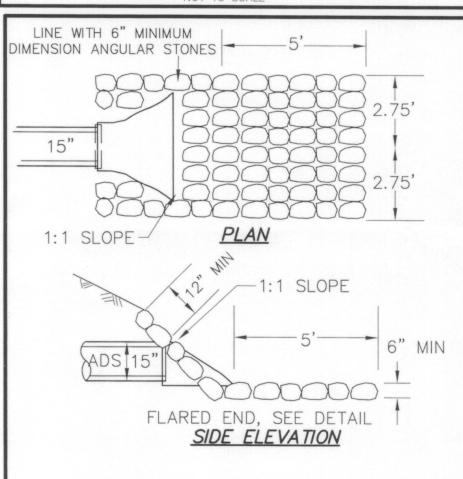


6" LOAM AND SEED 1-1/2" TYPE 1 SURFACE - 1-1/2" TYPE 1 BINDER - CAPE COD BERM 4" GRAVEL BORROW MASS D.P.W. MATERIAL SPEC. M 1.03.0 (8) SPEC. M 1.03.0(a) ... COMPACT SUBGRADE. AREA UNDER GRAVEL BASE COURSE TO BE FREE OF ORGANIC MATERIAL, TRASH, ECT. FILL WHERE REQUIRED SHALL CONFORM TO MASS. D.P.W. 1.03.c. 6" MAX. STONE PAVEMENT & MODIFIED CAPE COD BERM DETAIL

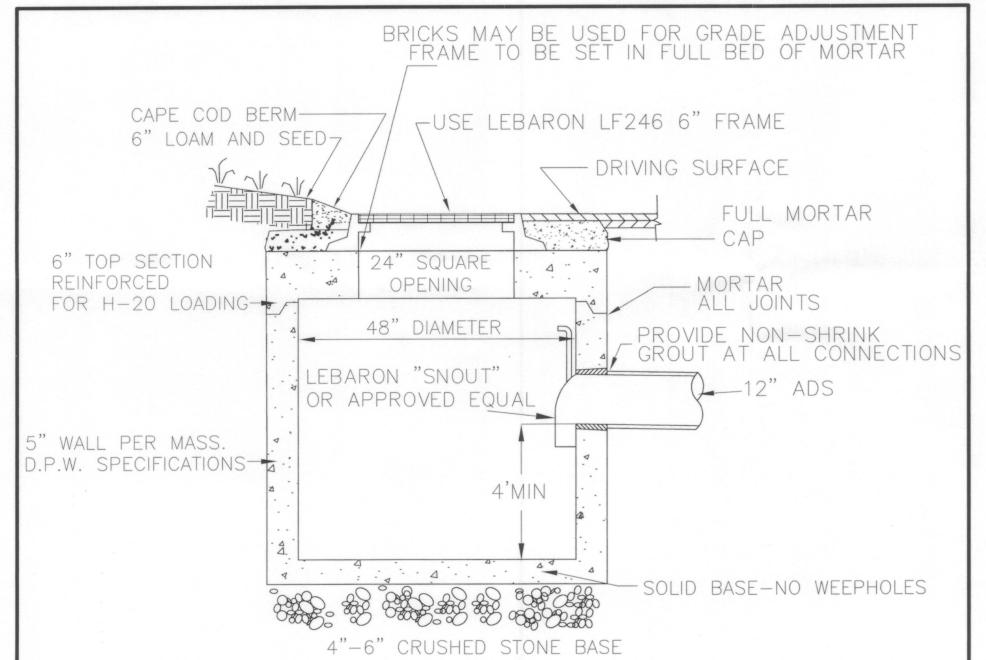


PAVEMENT OVERLAY DETAIL



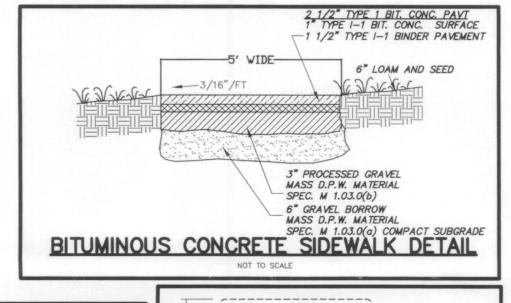


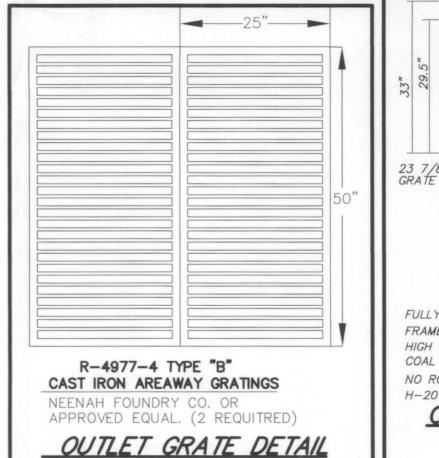
## FLARED END SECTION DETAIL



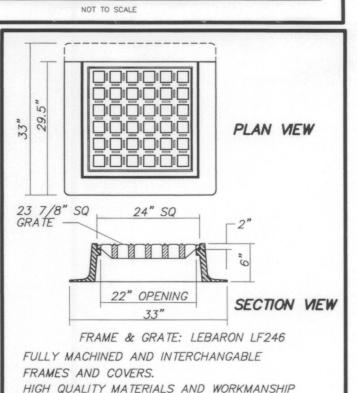
PRECAST CATCH BASIN DETAIL (CB1-CB2) NOT TO SCALE

15" ADS 1. 3/4" CHAMFER ON INV. = 208ALL EXPOSED EDGES 3000 PSI CONCRETE 3. REINFORCE ALL WALLS (TYP.)WITH NO. 4 BARS AT RECESSED LIP 12" O.C.E.W. 4. 1-1/2" CLEAR ON ALL REBARS (TYP. ALL SIDES) -INSTALL TWO R-4977-4
TYPE B' CAST IRON AREAWAY
GRATINGS RECESSED 1" INTO
STRUCTURE NEENAH FOUNDRY
CO. OR APPROVED EQUAL. 4" PVC IN-V-NOTCH WEIR-1-1/4" RECESSED LIP AROUND TOP FOR GRATE INSTALLATION ELEV. = 211 V-NOTCH WEIR EL=209.50 -FINISH GRADE ADJACENT TO V-NOTCH FRONT VIEW OUTLET STRUCTURE DETAIL





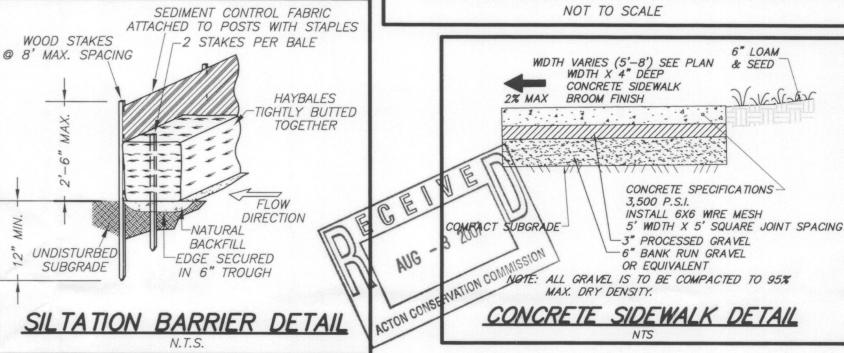
NOT TO SCALE



NOT TO SCALE

HIGH QUALITY MATERIALS AND WORKMANSHIP COAL TAR EPOXY PAINTED. NO ROCK COVERS. H-20 LOADING RATE CATCH BASIN FRAME

AND GRATE



## SITE PLAN MT. CALVARY LUTHERAN CHURCH 472 MASSACHUSETTS AVENUE ACTON, MASSACHUSETTS

DETAIL SHEET

J. STEWART ROBERTS ASSOC., INC. SCALE: AS SHOWN AUGUST 3, 2007

> STAMSKI AND MCNARY, INC. 80 HARRIS STREET ACTON, MASSACHUSETTS

(978) 263-8585 ENGINEERING - PLANNING - SURVEYING

C-2

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CIVIL

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